**Listing of Claims:** 

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A prism sheet for adjusting paths of light externally provided,

comprising:

a light incident surface for receiving the light; and

a light emission surface for emitting the light incident on the light incident surface,

wherein the light emission surface includes at least one light concentrate unit which has at least

two inclined surfaces on which the light is incident and refracted,

wherein a peak angle between the two inclined surfaces is in a range from about 90° to

about 120140° and a refraction index of the prism sheet is in a range from about 1.41 to about

1.49<del>1.7</del>.

2. (Original) The prism sheet of claim 1, wherein the light emission surface includes a

plurality of the light concentrate units each having the at least two inclined surfaces and the peak

angle.

3. (Original) The prism sheet of claim 2, wherein the light concentrate units each have a

shape of a prism column and are arranged parallel with each other in a longitudinal direction of

the light concentrate units.

4. (Original) The prism sheet of claim 1, wherein one of the two inclined surfaces forms a

first angle with respect to the light incident surface and the other of the two inclined surfaces

Page 2 of 13

Appl. No. 10/679,771

Response dated: October 20, 2006

Reply to Office action of August 23, 2006

forms a second angle with respect to the light incident surface, the first and second angles are

equal to each other.

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Withdrawn) The prism sheet of claim 6, wherein the peak angle is in a range from

about 90° to about 120°, and the refraction index of the prism sheet is in a range from about 1.51

to about 1.59.

9. (Withdrawn) The prism sheet of claim 6, wherein the peak angle is in a range from

about 90° to about 120°, and the refraction index of the prism sheet is in a range from about 1.61

to about 1.69.

10. (Previously Presented) The prism sheet of claim 1, wherein the light exits the inclined

surfaces at a light emission angle with respect to an imaginary line perpendicular to the light

incident surface, and the inclined surfaces are configured such that the light emission angle is in

a range from about 5.86° to about 26.23°.

Page 3 of 13

21C-0067 / LW8071US/SK

11. (Original) The prism sheet of claim 10, wherein the inclined surfaces are configured such that light incident on one of the inclined surfaces travels in accordance with the following conditions of Equations 1 to 3:

$$\beta = 90^{\circ} - \frac{\alpha^{\circ}}{2} - Equation 1$$

$$\gamma = \arcsin(\frac{1}{n_p} \times \sin \beta^{\circ}) - Equation 2$$

$$\theta_{out} = 90^{\circ} - \frac{\alpha^{\circ}}{2} - \gamma^{\circ} - Equation 3$$

where, " $\alpha$ " represents the peak angle, " $\beta$ " represents an incidence angle between a light incident direction and a normal of the one of the inclined surfaces, " $\gamma$ " represents the refraction angle, " $\theta_{out}$ " represents the emission angle, and " $n_p$ " represents the refraction index.

- 12. (Withdrawn) The prism sheet of claim 6, further including a curved surface formed between the at least two inclined surfaces of each of the light concentrate units.
- 13. (Withdrawn) The prism sheet of claim 12, wherein the light concentrate units each have a first width and the curved surface has a second width, a ratio of the second width to the first width is in a range from about 5% to about 20%.
- 14. (Previously Presented) The prism sheet of claim 1, further including a body in which the light incident on the light incident surface travels toward the light emission surface, wherein the body integrally formed with the light incident surface and the light emission surface.

Appl. No. 10/679,771

Response dated: October 20, 2006

Reply to Office action of August 23, 2006

15. (Withdrawn) The prism sheet of claim 6, further including a base layer in which the

light incident on the light incident surface travels toward the light emission surface, wherein the

base layer is separately formed and attached onto the light emission surface such that the at least

one light concentrate unit is disposed on the base layer.

16. (Previously Presented) The prism sheet of claim 1, wherein the light concentrate units

are made of material including polycarbonate, polyester, polyethyleneterphthalate, or a

combination thereof.

17. (Currently Amended) The prism sheet of claim 1, wherein the peak angle is in a range

from about 110° to about 120140°, and the refraction index varies in proportional to a value of

the peak angle.

18. (Currently Amended) A liquid crystal display device comprising:

a lamp assembly for generating light;

a diffusion plate for diffusing the light;

a prism sheet for adjusting paths of the light, the prism sheet including:

a light incident surface for receiving the light; and

a light emission surface for emitting the light incident on the light incident surface,

wherein the light emission surface includes at least one light concentrate unit which has at least

two inclined surfaces on which the light is incident and refracted, wherein a peak angle between

Page 5 of 13

21C-0067 / LW8071US/SK

the two inclined surfaces is in a range from about 90° to about 120140° and a refraction index of

the prism sheet is in a range from about 1.41 to about 1.491.7; and

a LCD panel assembly for displaying images using the light from the prism sheet and

image data externally provided.

19. (Original) The liquid crystal display device of claim 18, wherein the light emission

surface includes a plurality of the light concentrate units each having the at least two inclined

surfaces and the peak angle, and the light concentrate units each have a shape of prism column

and are arranged parallel with each other in a longitudinal direction of the light concentrate units.

20. (Canceled)

21. (Previously Presented) The liquid crystal display device of claim 18, wherein the

lamp assembly has a plurality of lamps arranged parallel with each other in a selected direction,

the lamps being disposed at a side of the diffusion plate opposite to a side at which the prism

sheet is disposed.

22. (Withdrawn) A method of fabricating a prism sheet for adjusting a light path,

comprising:

providing a base layer having a flat surface;

disposing light refracting material on the flat surface of the base layer, the light refracting

material having fluidity properties;

Page 6 of 13

21C-0067 / LW8071US/SK

Appl. No. 10/679,771

Response dated: October 20, 2006

Reply to Office action of August 23, 2006

leveling the light refracting material so that a layer of the light refracting material is

formed on the flat surface of the base layer;

transforming the layer of the light refracting material into a plurality of prism columns

arranged parallel with each other on the base layer; and

curing the plurality of prism columns to have solidity properties.

23. (Withdrawn) The method of claim 22, wherein the transforming includes pressing

the layer of the light refracting material with a pattern having the same shape as the prism

columns, wherein the prism columns are formed to have a peak angle at a peak edge of the

respective prism columns and the peak angle is in a range from about 90° to about 140°.

24. (Withdrawn) The method of claim 23, wherein the prism columns with solid

properties have a refraction index in a range from about 1.4 to about 1.7.

25. (Withdrawn) The method of claim 24, wherein the peak angle varies in proportional

to a refraction index of the light refracting material.

26. (Canceled)

27. (Canceled)

Page 7 of 13